METHOD OF DETERMINING THE FORMATION FACTOR OF AN UNDERGROUND RESERVOIR FROM MEASUREMENTS ON DRILL CUTTINGS TAKEN THEREFROM

ABSTRACT

Method and device for determining the formation factor of underground zones from drill cuttings. The device comprises a cell (1) associated with a device for measuring the electrical conductivity of the cell with the content thereof. The cell containing the drill cuttings is filled with a first electrolyte solution (A) of known conductivity (σ_A). After saturation of the drill cuttings by first solution (A), the global electrical conductivity (σ^*_A) of the cell with the content thereof is determined. After discharging first solution (A), the cell containing the drill cuttings is filled with a second electrolyte solution (B) of known conductivity (σ_B), and the global electrical conductivity (σ^*_B) of the cell containing the second solution and the cuttings saturated with the first solution is determined. The cuttings formation factor (FF) is deduced therefrom by combination of the measurements.

Applications: petrophysical characterization of reservoirs.